$N \cdot E \cdot A \cdot R$ OWNER'S GUIDE

MODEL G8 OUTDOOR, IN-GROUND, ALL-WEATHER SPEAKER



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G8 OUTDOOR, IN-GROUND, ALL-WEATHER SPEAKER



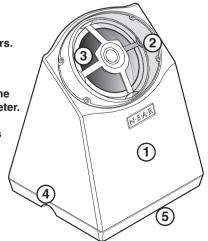
The **NEAR™ G8 Speakers** are fully-sealed outdoor speakers which provide exceptionally natural sound and will withstand all types of weather conditions. These speakers combine two patented technologies from NEAR: Metal Diaphragm Technology (MDT) which ensures speaker cone stability in all environmental conditions; and Magnetic Liquid Suspension (MLS), a Ferrofulld seal around the magnet gap and voice coil, providing protection from moisture and corrosion, as well as perfect voice coil alignment. The cabinet is a near-indestructible polyethylene enclosure with a heavy gauge stainless steel grille, protecting the drivers from projectiles or other objects, as well as being resistant to chipping and scratching. The enclosure color is molded-in, meaning the entire thickness of the wall is the same color, not a thin paint coating.

Balancing the Sound

Midrange and high frequencies are balanced to the low frequency output when the enclosure is buried as recommended. Another advantage to this design is the additional rigidity that the ground against the enclosure adds to the walls. Much like high-quality speaker systems for professional or home applications, the earth significantly reduces the enclosure's resonance, thereby further improving the clarity and detail of the sound. In essence, the solid earth around the loudspeaker enclosure becomes part of the loudspeaker system design. In some cases, it may not be practical to bury the enclosure very deep, or possibly not at all. The G8 will still deliver the finest sound of any available in-ground or on-ground speaker.

Loudspeaker Features

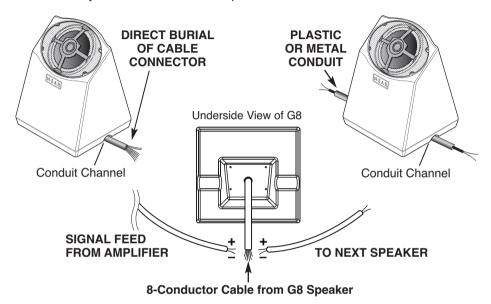
- 1. Polyethylene Enclosure with UV Inhibitors.
- 2. Stainless Steel Grille with stainless mesh screen.
- 3. 8-inch Nominal Diameter Metal Alloy Cone Woofer. 1-inch Titanium Alloy Cone Tweeter. Speaker drivers are constructed with special compound rubber cone surrounds that resist UV, chemicals, and chlorine.
- 4. Wiring Channel.
- 5. Wiring Connection (underside).



INSTALLATION OF THE G8 GARDEN SPEAKER

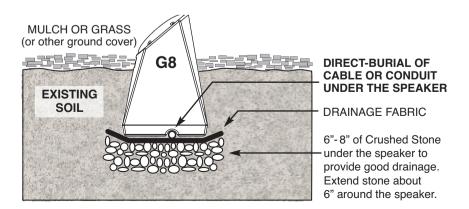
Direct Burial of Cable or Conduit

Depending on the type of installation, direct burial of the speaker cables from the amplifier to the loudspeakers may be adequate, or the use of 1"-1-1/2" ID conduit may be required for protecting the wires from possible physical damage if future excavation or other alterations are anticipated in the area of the installation. The G8 can accommodate either method, including the entry and exit conduits sliding conveniently under the bottom of the speaker enclosure.



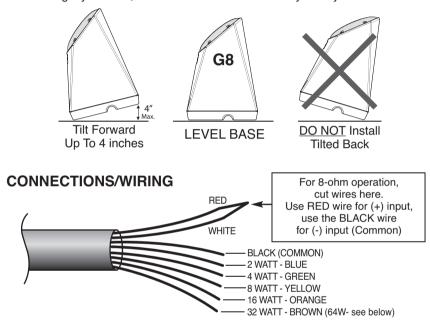
Connections can be protected using one of the following methods:

- Solder wires together using waterproof heat shrink tubing to seal.
- Use Waterproof Wire Connectors.
- Make connections with immersion-resistant Crimp Splices (Raychem).
- Use Grease Wire Caps available from several suppliers (Orbit, Toro Irrigation, etc.).



Placement

Dispersion angle of the G8 is incredibly wide. In fact, there is very little difference in sound level while walking from the side of the speaker enclosure to the front of the speaker enclosure. This means that the speaker can be placed along a walkway and provide an evenly distributed sound from one speaker to the next. Also, one speaker can project sound 180 degrees with clarity and detail, without the usual problems associated with "garden speakers" that project the sound at the ground, causing irregularities and poor midrange and high frequency response in the coverage. The G8 performs paging or music reproduction with unrivalled performance. DO NOT tilt the speaker backwards to prevent collection of rainwater. It can be tilted slightly forward, which is recommended in rainy/snowy areas.



An 8-conductor cable allows easy selection of the 70V power tap required. Choose the power level you need (2W-32W) by the color of the wire jacket, along with the Common (Black) input lead. The colors are identified above. If you are using a low impedance (8-ohm) amplifier, cut the RED and WHITE leads, then use the RED lead as your positive (+) input, along with the same Common (Black) input lead mentioned above.

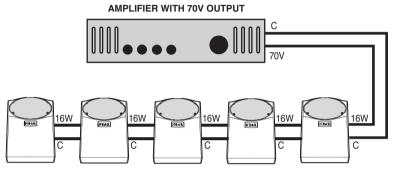
64W TAP: If you wish to use the 64W Tap of the speaker, it is necessary to remove the speaker grille and the woofer (4 screws on each). Move the BROWN wire from the 32-Watt connection on the cross-over board to the 64-Watt connection right next to it. Re-install the woofer and grille, making sure that the woofer gasket is properly installed between the woofer frame and the plastic enclosure to prevent any water ingress. Make connection to the amplifier using the BROWN lead previously identifying the 32-Watt tap.

Once you have selected the power level required, twist the wire together with wires from the amplifier, (+) and (-). It is highly recommended that the wire leads be soldered together to prevent any possibility of the connection becoming corroded.

Underpowering vs. Overpowering

Most speaker damage is caused by amplifiers with too little power (wattage). An overdriven amplifier clips the waveforms and sends distortion to the speakers. Clipping is usually audible; it may vary from a harsh sound to a fuzzy or unclear sound. If you hear this condition at loud volume levels, turn down the volume until the distortion is no longer present. Damage caused by operating the speakers at distorted volume levels is not covered by the warranty.

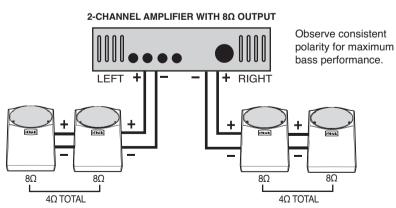
EXAMPLE OF 70V SYSTEM CONFIGURATION



5 SPEAKERS CONNECTED IN PARALLEL USING 16W TAPS

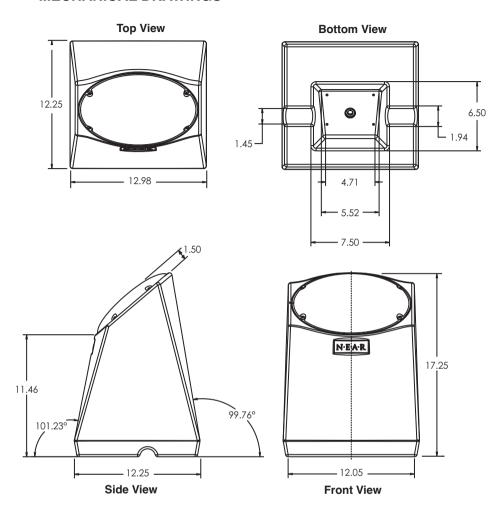
NOTE: The total number of speakers multiplied by the tap value cannot exceed the output power (in watts) of the 70V amplifier. The above example shows 5 total speakers. Using the 16W taps, you will need an amplifier with at least $(5) \times (16) = 80W$. A good rule of thumb is to select an amplifier with 20% greater power; in this case, an amplifier that delivers about 100W.

EXAMPLE OF 80 SYSTEM CONFIGURATION



2 SPEAKERS PER CHANNEL CONNECTED IN PARALLEL

MECHANICAL DRAWINGS



Maintenance

No maintenance is required. However, the exposed portion of the enclosure can be sprayed with a low pressure watering hose and then wiped clean with a cloth or sponge.

Security

The G8 is designed to be buried up to 10 inches in the ground. The sloped sides to the enclosure ensure that the speaker cannot be pulled out of the ground easily. Once the ground around the buried enclosure is packed firmly, it becomes even more difficult to remove the speaker.

TECHNICAL SPECIFICATIONS

Frequency Resp. (-10dB)*	45 Hz to 20 kHz
LF Driver	8-inch Nominal Diameter Metal Alloy Cone utilizing patented MLS (Magnetic Liquid Suspension)
HF Driver	Co-axial Design; 1" Titanium Cone
Sensitivity (1 W/1m, 8Ω)	91 dB SPL
Max. SPL (@ 1M)	114 dB continuous, 120 dB Peak
Max. Power Input (cont.)	150W (8Ω) or 64W (70V)
Impedance	Nominal 8Ω or 70V
Taps (70V only)	2W, 4W, 8W, 16W, 32W, 64W** (optional)
Input Terminations	8-Conducter Cable Color-Coded
Environmental	Meets or exceeds Mil-Std-810E, IEC IP56
Installation Hole Depth	10-inches Max.
Enclosure Material	LLDPE (Linked Low-Density Polyethylene, UV-Inhibited)
Enclosure Color	Green
Product Dimensions	17.25" H x 13" W x 12.25" D
Product Weight	14 lbs.

^{*}Half-Space Response **Requires simple wiring change inside G8 cabinet

LIMITED WARRANTY: EXCLUSION OF CERTAIN DAMAGES

The **NEAR G8 Speaker** is warranted to be free from defects in material and workmanship for five (5) years from the date of sale to the original purchaser. Any part of the product covered by this warranty that, with normal installation and use, becomes defective (as confirmed by Bogen upon inspection) during the applicable warranty period, will be repaired or replaced by Bogen, at Bogen's option, provided the product is shipped insured and prepaid to: Bogen Factory Service Department, 50 Spring Street, Ramsey, NJ 07446, USA. Repaired or replacement product will be returned to you freight prepaid. This warranty does not extend to any of our products that have been subjected to abuse, misuse, improper storage, neglect, accident, improper installation or have been modified or repaired or altered in any manner whatsoever, or where the serial number or date code has been removed or defaced.

THE FOREGOING LIMITED WARRANTY IS BOGEN'S SOLE AND EXCLUSIVE WARRANTY AND THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY. BOGEN MAKES NO OTHER WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED AND EXCLUDED TO THE MAXIMUM EXTENT ALLOWABLE BY LAW. Bogen's liability arising out of the manufacture, sale or supplying of products or their use or disposition, whether based upon warranty, contract, tort or otherwise, shall be limited to the price of the product. IN NO EVENT SHALL BOGEN BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, LOSS OF DATA OR LOSS OF USE DAMAGES) ARISING OUT OF THE MANUFACTURE, SALE OR SUPPLYING OF PRODUCTS, EVEN IF BOGEN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR LOSSES. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

Products that are out of warranty will also be repaired by the Bogen Factory Service Department – same address as above or call 201-934-8500. The parts and labor involved in these repairs are warranted for 90 days when repaired by the Bogen Factory Service Department. All shipping charges in addition to parts and labor charges will be at the owner's expense. All returns require a Return Authorization number. For most efficient warranty or repair service, please include a description of the failure.

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